

# NPIC Special Report

Prepared For: Rachel Fletcher

Seresto Incidents, with symptoms

Date range: 6/1/2018 - 8/14/2020



NPIC is a cooperative agreement between Oregon State University and the U.S. Environmental Protection Agency (cooperative agreement #X8-83947901)

## ***Important Information - Please Read***

### ***Explanatory Information --***

This report is prepared for use only by the person/party representing the individual, state or federal agency requesting the report.

The text in each narrative section is taken directly from the NPIC Pesticide Incident Database (PID) in "raw" form. Thus, the reader may find occasional misspellings, typos, poor sentence structure, and/or grammatical errors.

For some inquiries to NPIC, there may be no specific active ingredient named, for others there may be more than one active ingredient. Also, the person making the inquiry may not know the name or correct name of the pesticide product(s) involved - NPIC generally records the product name provided.

### ***Disclaimer --***

Material presented in this report is based on information as provided to NPIC by individuals who have contacted NPIC for information or to report a pesticide incident. None of this information has been verified or substantiated by independent investigation by NPIC staff, laboratory analysis, or by any other means. NPIC characterizes the information provided by assigning a certainty index and a severity index. The certainty index reflects the relationship between reported signs/symptoms and the expected signs/symptoms in the available literature about the active ingredient(s). The exposure scenario(s), route(s), and timing are also considered. The severity index characterizes the severity of reported signs/symptoms. NPIC makes no claims or guarantees as to the accuracy of the indexes or narratives, other than that NPIC has done its best to accurately document the information provided by the inquirer(s).

### ***Confidentiality Agreement --***

The person/party for whom this report was requested/prepared, as identified in this report, agrees to hold confidential the following information:

- the identity of any person/persons named in the report;
- addresses and/or telephone numbers of any person/persons listed in the report;
- any other information that can be linked to the identity of the person/persons listed in the report.

The use of this report in part or entirety by the person/party for whom the report was requested/prepared signifies acceptance by that person/party of the aforementioned confidentiality conditions.

---

**Date:** 2020-06-19 11:02:00.0

**Specialist:** SP

**Inq. Type:** Incident - AI Unknown

**Origin:** Email/Web

**Inquirer:**

**City, State:** UN

**Gender:** Female

**Region:**

**Country:** United States

**Type of Person:** Animal/Vet/Clinic

**Ref. From:** Internet

**Language:** English

**Questions:** Report an incident

**Actions:** Emailed Info  
Provided Manuf. / Distributor Contact  
Provided NPIC Website

**Inquirer exposure:** No exposure for Inquirer

**Products:** Product 1:  
Name: Seresto collar

**Other entity exposure info:** Entity Type: Single Animal  
Severity: Major  
Species: Canine  
Breed: Miniature Schnauzer  
Gender: Unknown

Product 1:  
Prod. Name: Seresto collar  
Exposure Type: Exposure: Dermal  
Location: Unknown

**Narrative:** Email Received:  
I am a veterinarian treating a patient who recently had a confirmed (very severe, life threatening) drug reaction to a Seresto collar- skin biopsies revealed "Sterile pustular erythroderma of the mini schnauzer" secondary to recent application of Seresto collar. I was wondering where/how I can report this reaction/ if this is the right forum to report it?

Email Response:  
Thank you for emailing and attempting to report an adverse health effect due to a pesticide. You mentioned patient. If it is human please call us at 800-858-7378 Monday - Friday from 8:00am to 12:00pm Pacific Time to speak directly to a Pesticide Specialist to further report

and discuss the situation. In order to complete your report, we need to confirm the identity of the specific product.

The National Pesticide Information Center at Oregon State University is an information service and has no regulatory authority in relation to pesticides. However, our incident reports are made available to the US EPA. Our website features a reporting database that veterinarians can use to report adverse effects for animals related to pesticide products.

Veterinary Pesticide Adverse Effects Reporting  
<http://npic.orst.edu/vet> (for use only by veterinary professionals)

Please have the EPA registration number of the Seresto collar available if you call. This information is specific to each product and is located on the label. If you no longer have the package, you might consider contacting the owner.

An additional mode of reporting adverse effects is by contacting the manufacturer. Under FIFRA 6(a)(2), manufacturers are required to submit adverse effects information about their products to the US EPA. Manufacturer contact information can be accessed from the following link:

Manufacturer Contact Information  
<http://npic.orst.edu/ingred/manuf.htm>

**Date:** 2020-06-19 08:04:00.0  
**Specialist:** WH  
**Inq. Type:** Incident  
**Origin:** Phone  
**Inquirer:**  
**City, State:** MA  
**Gender:** Male  
**Region:** 1  
**Country:** United States  
**Type of Person:** General Public  
**Ref. From:** NPIC Website  
**Language:** English  
**Questions:** Health: human/domestic  
**Actions:** Verbal Info  
No contact information provided

**Inquirer exposure:** Entity Type: Male  
Symptoms: Atypical  
Certainty: Inconsistent  
Severity: Moderate  
Age: 58.0 years

**Products:** Product 1:  
Name: Seresto Flea Collar  
AI: FLUMETHRIN  
AI: IMIDACLOPRID  
Exposure Type: Exposure: Unknown  
Location: Home - Inside

**Narrative:** Caller (age 58) seeking health information related to the use of Seresto Flea Collar (active ingredients flumethrin, imidacloprid) on a dog. Caller reported that after applying the collar onto the dog, he felt shortness of breath, numbness in his fingers, cough, and pins and needles feeling on his skin. Caller reported that he applied the collar onto his dog at the end of February or beginning of March (02/2020-03/2020). Caller reported that he was not certain how soon after putting the collar on the dog that his symptoms began. Caller reported that there are five other people that live in the home with him, but that none of them have had any symptoms. Caller reported that his symptoms come in waves, but that they are improving. Caller asked about the potential health risks related to the situation.

Discussed risk equation concepts, including toxicity and routes of exposure. Discussed potential health effects of exposure to the active ingredient (NPIC Imidacloprid Fact Sheet, UKPID Monograph: Flumethrin).

**Date:** 2020-06-17 13:28:00.0

**Specialist:** SP

**Inq. Type:** Incident

**Origin:** Email/Web

**Inquirer:**

**City, State:** UN

**Gender:** Male

**Region:**

**Country:** United States

**Type of Person:** General Public

**Ref. From:** NPIC Website

**Language:** English

**Questions:** Health: human/domestic

**Actions:** Emailed Info  
Provided NPIC Website  
No contact information provided

**Inquirer exposure:** Entity Type: Male  
Symptoms: Atypical  
Certainty: Inconsistent  
Severity: Minor

**Products:** Product 1:  
Name: Seresto Flea Collar  
AI: IMIDACLOPRID  
AI: FLUMETHRIN  
Exposure Type: Exposure: Dermal  
Location: Home - Inside

**Narrative:** Email Received: [Seresto Flea Collar (active ingredients imidacloprid, flumethrin)]  
Are you the same person as [omitted]?

The reason I ask is that I'm trying to get to the bottom of some symptoms I've been experiencing. My doctors (GP and cardiologist) actually thought I had COVID-19 because of my symptoms. I tested negative. But then I read on the National Pesticide Information Center's web site that farm workers reported breathlessness among other symptoms after exposure to Imidacloprid. I have had shortness of breath (coincidentally a symptom of COVID). It occurred to me that I might be accidentally ingesting toxins from my dog's flea and tick collar. He enjoys vigorous scratching around his neck and I would rarely if ever make a pit stop at the sink after that to wash my hands before snacking on fruit or something. A bit more homework (it's a Seresto collar) led me down the path of investigating Imidacloprid and Flumethrin (the two active ingredients) and that's when I saw the name [omitted]. I've had other weird symptoms like some numbness in my

fingers and randomly recurring pins and needles in my skin.

Just in the last day, I started paying much more attention to my contact with the dog and my hand cleaning. We'll see what happens. But I thought I would write to you about this.

Email Response: [Resources used: NPIC Fact Sheet and IPCS INCHEM - FLUMETHRIN]

Thank you for your email. As you might imagine, the potential risk from any pesticide is complex and situation specific. We would be happy to talk with you about that over the phone. At your convenience, please call us at 800-858-7378, Monday - Friday between the hours of 8:00am to 12:00pm Pacific Time to speak directly to a Pesticide Specialist. In the meantime, please see the links below for general information about pesticide risk.

Pesticides: What's my Risk?  
<http://npic.orst.edu/factsheets/WhatsMyRisk.html>

Minimizing Pesticide Risk  
<http://npic.orst.edu/health/minexp.html>

If possible, please consider having the EPA registration number of the Seresto flea collar available for the Pesticide Specialist when you call. This information is located on the label.

**Date:** 2020-02-25 11:46:00.0

**Specialist:** WH

**Inq. Type:** Incident

**Origin:** Phone

**Inquirer:**

**City, State:** ATCHISON, KS

**Gender:** Female

**Region:** 7

**Country:** United States

**Type of Person:** General Public

**Ref. From:** Social Media

**Language:** English

**Questions:** Report an incident

**Actions:** Provided Other Fed Agency Contact  
Provided State Lead Contact  
Verbal Info

**Inquirer exposure:** No exposure for Inquirer

**Products:** Product 1:  
Name: Seresto Flea Collar  
AI: IMIDACLOPRID  
AI: FLUMETHRIN

**Other entity exposure info:** Entity Type: Group of Animals  
Symptoms: Atypical  
Certainty: Inconsistent  
Severity: Minor  
Species: Canine  
Breed: Golden Retriever

Product 1:  
Prod. Name: Seresto Flea Collar  
AI: IMIDACLOPRID  
AI: FLUMETHRIN  
Exposure Type: Exposure: Dermal  
Location: Home - Inside

**Narrative:** Caller seeking incident reporting information related to the use of Seresto Flea Collar (active ingredients flumethrin, imidacloprid) on two dogs (8 year old 70 pound neutered female Golden Retriever, 10 month old 60 pound neutered male Golden Retriever). Caller reported that last summer (08/2019), she used the collars on both of her dogs. Caller reported that she had had a dog die previously from the use of a pet medicine product (NexGard). Caller reported that was the reason she chose the collar instead. Caller reported that one day after putting



the collars on her dogs, they both became lethargic and had diarrhea. Caller reported that she stopped using the collars that same day. Caller reported that she took both of the dogs to the veterinary office, and reported that both of her dogs were treated and recovered. Caller reported that her female dog also recently used Bravecto. Caller reported that the dog nearly died. Caller reported that she was wanting to report the incidents.

Discussed the difference between products considered to be pesticides versus drugs, including how they are used, labelled, and regulated. Discussed NPIC services, including a lack of regulatory authority.

Provided contact information for FDA Pet Product line for incident reporting information. Provided contact information for State Lead Pesticide Agency for incident reporting information.

References used: NPIC Imidacloprid Fact Sheet, UKPID Monograph: Flumethrin, Toxicology, HSDB: Imidacloprid.

**Date:** 2019-08-08 10:54:00.0  
**Specialist:** SB  
**Inq. Type:** Incident  
**Origin:** Phone  
**Inquirer:**  
**City, State:** SAN DIEGO, CA  
**Gender:** Female  
**Region:** 9  
**Country:** United States  
**Type of Person:** General Public  
**Ref. From:** Internet  
**Language:** English  
**Questions:** Health  
**Actions:** Verbal Info  
No contact information provided

**Inquirer exposure:** No exposure for Inquirer

**Products:** Product 1:  
Name: Suspend Polyzone  
AI: DELTAMETHRIN  
Product 2:  
Name: Seresto Flea Collar  
AI: IMIDACLOPRID  
AI: FLUMETHRIN

**Other entity exposure info:** Entity Type: Single Animal  
Symptoms: Consistent Symptoms  
Certainty: Consistent  
Severity: Moderate  
Species: Canine  
Breed: chow-shiba inu-corkie mix  
Age: 12.0 years  
Weight: 11.363636 kg  
Gender: Female Neuter

Product 1:  
Prod. Name: Seresto Flea Collar  
AI: FLUMETHRIN  
AI: IMIDACLOPRID  
Exposure Type: Exposure: Dermal  
Location: Unknown

**Narrative:** Related subsequent log: 6530

Caller seeking information about health. Caller reported a Pest Control

Company was going to come in later on the day of the call to treat for insects in her home. Caller reported they would treat with "Suspend Polyzone," which she'd found online had active ingredient deltamethrin (also per NPIRS). When asked if she had an EPA registration number for the product, caller said she would contact the Pest Control Company and call NPIC back for health-related information. Caller then reported her dog (12 years, 25 lbs., spayed female, chow-shiba inu-corkie mix) had a reaction to a "Seresto Flea Collar" (active ingredients flumethrin, imidacloprid, per NPIRS) in May or June of 2019, 2-3 months before the call. Caller reported the collar was put on the dog for ticks and left on for 5 days before removal. Caller reported immediately after putting it on, the dog had symptoms, including pacing, appearing uncomfortable, not being able to go up and down stairs, and paralysis. Caller reported the dog was treated by a vet and was better by the time of the call. Caller reported this experience with her dog was prompting her to check on the risks of the Polyzone product.

Discussed NPIC services, including its data collection practices and EPA's access to NPIC data. Discussed specialist would enter anonymous information about the situation with her dog and the caller in a database that had data accessible to regulators. Caller then ended the call to contact her Pest Control Company.

Caller called NPIC back later; see log 6530

Resources used:

NPIC Deltamethrin Technical Fact Sheet

Small Animal Toxicology, pyrethroids chapter

**Date:** 2019-06-21 09:04:00.0

**Specialist:** WH

**Inq. Type:** Incident

**Origin:** Phone

**Inquirer:**

**City, State:** LONG ISLAND, NY

**Gender:** Female

**Region:** 2

**Country:** United States

**Type of Person:** General Public

**Ref. From:** Not Obtained

**Language:** English

**Questions:** Health  
Report an incident

**Actions:** Provided Other Org. Contact  
Provided State Lead Contact  
Verbal Info

**Inquirer exposure:** No exposure for Inquirer

**Products:** Product 1:  
Name: Seresto Flea Collar  
AI: FLUMETHRIN  
AI: IMIDACLOPRID

**Other entity exposure info:** Entity Type: Single Animal  
Symptoms: Consistent Symptoms  
Certainty: Consistent  
Severity: Moderate  
Species: Canine  
Breed: beagle-redtick coonhound mix  
Age: 5.0 years  
Weight: 27.272726 kg  
Gender: Male Neuter

Product 1:  
Prod. Name: Seresto Flea Collar  
AI: IMIDACLOPRID  
AI: FLUMETHRIN  
Exposure Type: Exposure: Dermal  
Location: Unknown

**Narrative:** Caller seeking health and incident reporting information related to the use of a Seresto Flea Collar (active ingredients imidacloprid, flumethrin) on a dog. Caller reported that for the last five years, she has used the product on her dog (5.5 year old, 60 pound neutered male Beagle/Redtick Coonhound mix). Caller reported that the dog

male Beagle/Redtick Coonhound mix). Caller reported that the dog has never had any reaction to the product before. Caller reported that five days ago (06/16/2019) her dog had a seizure. Caller reported that she took the dog to the emergency veterinarian the next day (06/17/2019). Caller reported that the dog has recovered from the issue. Caller reported that she was wanting to report the incident, as she was concerned that it might happen again. Caller reported that she called the manufacturer of the product, but reported that they informed her that their call center was down due to a bad storm in the area. Caller reported that they have used the product as a preventative measure, and reported that they have never noticed ticks in their area. Caller asked about the potential health risks related to the situation, and asked if seizures were a reaction that had been commonly reported.

Discussed risk equation concepts, including toxicity and routes of exposure. Discussed potential health effects of exposure to the active ingredients (NPIC Imidacloprid Fact Sheet, Recognition and Management of Pesticide Poisonings: Pyrethroids, Inchem: Flumethrin). Discussed NPIC services, including a lack of regulatory authority.

Provided contact information for State Lead Pesticide Agency for regulatory information. Provided contact information for Biointegral Resource Center (BIRC) for pest control information.

**Date:** 2019-06-14 10:51:00.0

**Specialist:** AL

**Inq. Type:** Incident

**Origin:** Phone

**Inquirer:**

**City, State:** SAPPHIRE, NC

**Gender:** Male

**Region:** 4

**Country:** United States

**Type of Person:** General Public

**Ref. From:** Internet

**Language:** English

**Questions:** Report an incident

**Actions:** Provided State Lead Contact  
Verbal Info

**Inquirer exposure:** No exposure for Inquirer

**Products:** Product 1:  
Reg. Num.: 11556-155  
Name: PNR1427 INSECTICIDE  
AI: IMIDACLOPRID  
AI: FLUMETHRIN

**Other entity exposure info:** Entity Type: Single Animal  
Symptoms: Atypical  
Certainty: Inconsistent  
Severity: Moderate  
Species: Canine  
Breed: Labrador  
Age: 6.0 years  
Weight: 30.454544 kg  
Gender: Male

Product 1:  
Reg. Num.: 11556-155  
Prod. Name: PNR1427 INSECTICIDE  
AI: IMIDACLOPRID  
AI: FLUMETHRIN  
Exposure Type: Exposure: Dermal  
Location: Home - Inside

**Narrative:** Caller wishing to file a report after his dog had a reaction to a Seresto flea collar, EPA registration number 11556-155 (active ingredients imidacloprid, flumethrin). Caller reported that the dog (6 year old, 67 lb, intact male purebred Labrador) had been wearing the collar for

about 9 months or a year, and then in March (three months ago) had a large seizure in their home. Caller reported that he immediately removed the collar, and about six weeks later the dog had another seizure. Caller reported that the dog is a hunting dog and is in excellent physical health. Caller reported that he has been working with his veterinarian who also suspects that the collar was the source of the seizures. Caller reported he has been detoxing the dog for a couple months now and hasn't had any further seizures. Caller reported he has seen extensive reports of reactions to this specific type of flea collar and is shocked that the EPA has not stopped it from being sold.

Discussed NPIC services, including not working for the EPA directly. Discussed NPIC incident documentation and reporting to the EPA. Discussed that reporting adverse reactions to the manufacturer is an additional method to report when incidents occur. Discussed that products are also registered at a state level, and provided the State Lead Pesticide Agency as a resource for reporting his concerns regarding the availability of this product. Resources Used: Hazardous Substances Data Bank (HSDB), NPIC Fact Sheet, Human Health Risk Assessment 2018 Flumethrin. Caller sent followup email, see log 4443.

**Date:** 2019-06-10 09:27:00.0  
**Specialist:** AS  
**Inq. Type:** Incident  
**Origin:** Phone  
**Inquirer:**  
**City, State:** VAUGHAN, NC  
**Gender:** Female  
**Region:** 4  
**Country:** United States  
**Type of Person:** General Public  
**Ref. From:** Not Obtained  
**Language:** English  
**Questions:** Health  
**Actions:** Provided Manuf. / Distributor Contact  
Verbal Info

**Inquirer exposure:** No exposure for Inquirer

**Products:** Product 1:  
Name: Seresto Flea Collar  
AI: FLUMETHRIN  
AI: IMIDACLOPRID

**Other entity exposure info:** Entity Type: Single Animal  
Symptoms: Atypical  
Certainty: Inconsistent  
Severity: Minor  
Species: Canine  
Breed: english mastiff  
Age: 2.0 years  
Weight: 72.72727 kg  
Gender: Male Neuter

Product 1:  
Prod. Name: Seresto Flea Collar  
Exposure Type: Exposure: Dermal  
Location: Home - Inside

**Narrative:** Caller seeking health information about whether it was normal for her dog (2 year old neutered male, 160 pounds, english mastiff) to have bleeding skin where he had been wearing a Seresto Flea Collar (active ingredients flumethrin, imidacloprid, per product label on manufacturer website) for 1 week. Caller reported the dog had been wearing a second collar (no active ingredients) that hid the affected neck area and so she just recently noticed the symptoms. Caller reported she noticed the dog scratching at his neck. Caller asked if



these symptoms were normal. Caller reported she did not have any additional product information. Caller reported the dog did not have symptoms beyond the bleeding skin and reported a family member was currently taking the dog to the veterinarian.

Discussed NPIC services, including lack of medical training and collection of incident data. Discussed the option for NPIC to discuss symptoms and discussed obtaining additional product information (product active ingredients located after end of inquiry). Discussed contacting the product manufacturer to further report the adverse reaction and provided their contact information. Resources Used: Hazardous Substances Data Bank (HSDB) (imidacloprid); Human Health Draft Risk Assessment for Registration Review Imidacloprid 2017; Human Health Scoping Doc for Reg Review 2016 (flumethrin); Human Health Risk Assessment for Reg Review 2018 (flumethrin)

---

**Date:** 2019-03-08 08:26:00.0

**Specialist:** SB

**Inq. Type:** Incident - AI Unknown

**Origin:** Phone

**Inquirer:**

**City, State:** LINDALE, TX

**Gender:** Female

**Region:** 6

**Country:** United States

**Type of Person:** General Public

**Ref. From:** EPA Website

**Language:** English

**Questions:** Regulation

**Actions:** Provided EPA HQ / OPP Contact  
Provided EPA Region Contact  
Provided State Lead Contact  
Verbal Info

**Special Circumstances:** Potentially Counterfeit/Illegal

**Inquirer exposure:** No exposure for Inquirer

**Products:** Product 1:  
Name: Seresto Flea Collar  
Product 2:  
Name: Seresto Flea Collar

**Other entity exposure info:** Entity Type: Female  
Severity: Minor  
Age: 62.0 years  
Gender: Female

Product 1:  
Prod. Name: Seresto Flea Collar  
Exposure Type: Exposure: Inhalation  
Location: Home - Inside

**Narrative:** Caller seeking regulation information about two Seresto Flea Collars (unknown active ingredients). Caller reported she and her husband had purchased two collar products with the Seresto name from businesses online. For one of the collars, caller said she spoke to the manufacturer, Bayer, who told her the product came from Australia and was not legally allowed for sale in the U.S. Caller reported she wanted to report to someone that the collar was being "illegally" sold online. Caller reported the second collar product came from a supplier

in a city in her state that originally got it from China. Caller reported Seresto collars she'd used in the past were odorless but that the one from China had a "bad" odor. Caller, 60, reported she'd opened the product from China while playing cards with her sister, 62, about 2 weeks before the call. Caller reported there were no symptoms for herself but her sister immediately had a headache. Caller reported the day before the call, while she was talking to Bayer about the product from Australia, she'd opened that product per Bayer's instructions. Caller reported there was no odor with the Australian product and that Bayer had mentioned that the difference between the Australian and U.S. collars was in their "strength."

Discussed NPIC services, including no regulatory authority. Discussed how state and federal pesticide regulations work and that she may want to notify both levels of regulators. Discussed the EPA as the entity with federal regulatory authority over pesticides; provided EPA Office of Pesticide Programs and EPA regional contacts. Discussed State Lead Pesticide Agency's regulatory authority; provided contact.

**Date:** 2019-02-27 06:14:00.0  
**Specialist:** SB  
**Inq. Type:** Incident - AI Unknown  
**Origin:** Voice Mail  
**Inquirer:**  
**City, State:** HARRISON, ME  
**Gender:** Female  
**Region:** 1  
**Country:** United States  
**Type of Person:** General Public  
**Ref. From:** On-file  
**Language:** English  
**Questions:** Report an incident  
**Actions:** Provided Manuf. / Distributor Contact  
Verbal Info  
**Inquirer exposure:** No exposure for Inquirer  
**Products:** Product 1:  
Name: Seresto Flea Collar  
**Other entity exposure info:** Entity Type: Single Animal  
Severity: Moderate  
Species: Feline  
Breed: short hair  
Age: 5.0 years  
Weight: 5.909091 kg  
Gender: Male Neuter  
Product 1:  
Prod. Name: Seresto Flea Collar  
Exposure Type: Exposure: Dermal  
Location: Home - Inside  
**Narrative:** Related voice mail: 947

Voice mail message. Returned call at 08:16 2/28/19.

Repeat caller seeking to report an incident involving a Seresto flea collar for cats (unknown active ingredient). Caller reported she put one of the collars on her cat (5 years, 13 lbs., fixed male, short hair) about 1 week before the call. Caller reported the first 3 days the cat had the collar on, the cat was "screaming" around inside the house. Caller reported on the 4th day, she took the collar off and saw raw skin and a rash on the cat's neck. Caller reported she called her vet who told her to wash the area, which she did, and to apply lanolin, but she applied

an oil instead because she didn't have lanolin. Caller reported since then the cat's skin has gotten worse. Caller reported the cat is also clawing at the area and that the vet told her to clip the cat's claws, which she said she couldn't do because the cat would fight too much. Caller reported the vet gave her a case number but that she didn't have it with her. Caller reported she wanted to report what had happened. Caller reported she did not know what the active ingredient was but that the collar was intended for cats. Caller reported she knew the manufacturer was Bayer.

Discussed NPIC services, including no vet training. Discussed how NPIC documents reports of exposures. Discussed contacting her vet again about her cat's worsening skin. Discussed contacting the manufacturer also to report the situation, as they may be required to keep and report records for adverse reactions to their products (EPA "Incident reporting by pesticide manufacturers/registrants" web page), and provided contact.

**Date:** 2018-08-13 08:25:00.0

**Specialist:** AS

**Inq. Type:** Incident

**Origin:** Phone

**Inquirer:**

**City, State:** MILTON, FL

**Gender:** Female

**Region:** 4

**Country:** United States

**Type of Person:** General Public

**Ref. From:** EPA Website

**Language:** English

**Questions:** Health

**Actions:** Provided EPA HQ / OPP Contact  
Verbal Info

**Inquirer exposure:** No exposure for Inquirer

**Products:** Product 1:  
Name: Seresto Flea Collar  
AI: IMIDACLOPRID  
AI: FLUMETHRIN

**Other entity exposure info:** Entity Type: Single Animal  
Symptoms: Consistent Symptoms  
Certainty: Consistent  
Severity: Minor  
Species: Canine  
Breed: Chihuahua  
Age: 13.0 years  
Weight: 3.6363635 kg  
Gender: Female Neuter

Product 1:  
Prod. Name: Seresto Flea Collar  
AI: IMIDACLOPRID  
AI: FLUMETHRIN  
Exposure Type: Exposure: Dermal  
Location: Home - Inside

**Other entity exposure info:** Entity Type: Single Animal  
Symptoms: Consistent Symptoms  
Certainty: Consistent  
Severity: Moderate  
Species: Canine  
Breed: Chihuahua

Age: 13.0 years  
Weight: 2.7272727 kg  
Gender: Male Neuter

Product 1:

Prod. Name: Seresto Flea Collar  
AI: FLUMETHRIN  
AI: IMIDACLOPRID  
Exposure Type: Exposure: Dermal  
Location: Home - Inside

**Narrative:**

Caller seeking health information about whether Seresto Flea Collars (active ingredients flumethrin, imidacloprid, per caller) could cause symptoms in two of her dogs. Caller reported one of her dogs is in the ICU right now. Caller reported the dog (male, neutered, 13 years old, Chihuahua, 5.5-6 pounds) had been wearing a collar for over one month. Caller reported the dog had some sort of infection and then he began "cluster seizing" and "staggering" and she brought him to the ER last night. Caller reported he had a blood transfusion. Caller reported she took the collar off of the dog when he was seizing. Caller reported the dog is not eating. Caller reported the doctors thought that the symptoms could be caused by cancer. Caller reported she mentioned the collar to the doctors but they did not seem to think it could be related. Caller reported the dog was put in an oxygen chamber. Caller reported the second dog that had a reaction (female, spayed, 13 years old, Chihuahua, 7-8 pounds) had the collar on for a "couple weeks" and was lethargic, not eating, and throwing up. Caller reported she took the collar off of the dog and now she is "back to normal." Caller reported she has begun to do research on the collars and saw that the EPA is collecting data on incidents. Caller reported she spoke with the collar manufacturer and they told her that it was impossible for the dog's symptoms to be related to the collar because the collars are only topical. Caller reported the manufacturer suggested a bath because the ingredients can stay on the skin for 48 hours. Caller reported the manufacturer told her that they have completed many trials and dogs have not had adverse reactions. Caller reported she could not find an EPA registration number on the can. Caller reported she has "numerous" dogs and purchased 16 collars. Caller reported she purchased the products online and it said it was from the U.S. Caller reported the directions on the product label are all in French. Caller reported she put the correct size collar on given each of the dogs. Caller asked if she could have access to information about incidents related to pet collars.

Discussed required manufacturer reporting to the EPA of adverse reactions to pesticide products. Discussed ongoing monitoring of pet product incidents by the EPA and discussed NPIC services, including providing incident data to the EPA. Discussed EPA registration numbers on pesticide products, including ensuring legal registration of the product with the EPA. Provided contact information for the EPA for possible information about manufacturer reporting related to pet products. Discussed providing the caller's veterinarian with the names of the active ingredients in the collar. Discussed potential health effects of exposure to imidacloprid (NPIC Imidacloprid Fact Sheet) and flumethrin (Flumethrin Human Health Risk Assessment for Reg Review 2018). Resources Used: Recognition and Management of Pesticide Poisonings: Chapter 4 Pyrethrins and Pyrethroids, Flumethrin Human Health Risk Assessment for Reg Review 2018, NPIC Imidacloprid Technical Fact Sheet